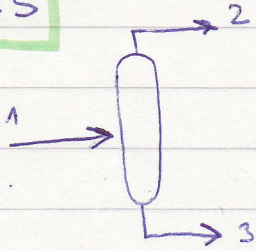


U2.5



| | 1 | 2 | 3 | |
|--------------|----------|-------|----------|----------------------|
| A - fenol | 0.35 | 0.95 | x_{A3} | 6. neznámých |
| B - kresol | 0.40 | 0.05 | x_{B3} | 4. bilance |
| C - xylenol | 0.20 | — | x_{C3} | 1. $\sum x_i = 1$ |
| D - těžší f. | 0.05 | — | x_{D3} | 1. 90% A zůstává v ② |
| n | 100 kmol | n_2 | n_3 | |

$$0.95 \cdot n_2 \text{ (nebo) } n_2 = 0.9 \cdot 0.35 \cdot 100$$

$$0.35 \cdot 100 = x_{A3} n_3 + 0.95 n_2$$

$$100 \cdot 0.2 = x_{C3} n_3$$

$$100 \cdot 0.05 = x_{D3} n_3$$

$$n_1 = n_2 + n_3$$

$$x_{A3} + x_{B3} + x_{C3} + x_{D3} = 1$$

$$n_2 = 33.1579 \text{ kmol dehtifikát}$$

$$n_3 = 66.842 \text{ kmol zbytek}$$

$$x_{C3} = 0.2992 \quad \text{xylenol}$$

$$x_{B3} = 0.0748$$

$$x_{A3} = 0.05236 \quad \text{fenol}$$

$$x_{B3} = 0.5736 \quad \text{kresol}$$

□